

CLAIMS

We claim:

1. A method of serving web pages from a server, said method comprising:
accepting a request from a client computer system, said request specifying an address of a
requested web page file;
executing a program that manipulates an in-memory representation of said requested web
page file to create a manipulated in-memory representation of said requested web
page that contains dynamic content;
calling a routine that generates a markup language document from said manipulated in-
memory representation of said requested web page file; and
returning said markup language document to said client computer system.

2. The method of serving web pages as claimed in claim 1 further
comprising:

determining if said requested web page file is current.

3. The method of serving web pages as claimed in claim 2 further comprising:

creating a new in-memory representation of a new version of said requested web page file if said requested web page file is not current.

4. The method of serving web pages as claimed in claim 2 further comprising:

automatically generating a new in-memory representation of said requested web page file when said requested web page file is modified.

5. The method of serving web pages as claimed in claim 1 wherein said in-memory representation of said requested web page file comprises a Document Object Model representation.

6. The method of serving web pages as claimed in claim 1 wherein said program that manipulates an in-memory representation of said requested web page file comprises Java code.

7. The method of serving web pages as claimed in claim 1 wherein said program that manipulates an in-memory representation of said requested web page file performs the steps of:

automatically generating a new in-memory representation of said requested web page file when said requested web page file is modified; and
generating a clone of said new in-memory representation of said requested web page file.

8. The method of serving web pages as claimed in claim 1 wherein said program that manipulates an in-memory representation of said requested web page file performs the steps of:

locating an identifier of a dynamic element to change within said in-memory representation of said requested web page file; and
changing said dynamic element in said in-memory representation of said requested web page file.

9. A method of serving web pages from a server, said method comprising:
creating a modified mark-up language file for representing a web page appearance, said modified mark-up language file containing embedded identifier tags for identifying locations for dynamic content;
creating interactive program functions for generating dynamic content, said interactive program functions for modifying sections of said in-memory representation of said

mark-up language file associated with said identifier tags identifying locations for dynamic content; and

deploying said modified mark-up language file and said interactive program functions to a server system wherein said server system that creates an in-memory representation of said mark-up language file, executes said interactive program functions to manipulate said in-memory representation of said mark-up language file to create a manipulated in-memory representation of said mark-up language file, and generates a web page from said manipulated in-memory representation of said mark-up language file.

10. The method of serving web pages as claimed in claim 9 wherein said server system further determines if said modified mark-up language file is current.

11. The method of serving web pages as claimed in claim 10 wherein said server system creates a new in-memory representation of a new version of said modified mark-up language file if said modified mark-up language file is not current

12. The method of serving web pages as claimed in claim 10 wherein said server system automatically generates a new in-memory representation of said modified mark-up language file when said modified mark-up language file is modified.

13. The method of serving web pages as claimed in claim 9 wherein said in-memory representation of said modified mark-up language file comprises a Document Object Model representation.

14. The method of serving web pages as claimed in claim 9 wherein said interactive program functions comprise Java code.

15. The method of serving web pages as claimed in claim 9 wherein said interactive program functions perform the steps of:
automatically generating a new in-memory representation of said modified mark-up language file when said modified mark-up language file is modified; and
generating a clone of said new in-memory representation of said modified mark-up language file.

16. The method of serving web pages as claimed in 9 1 wherein said interactive program functions perform the steps of:

locating an identifier of a dynamic element to change within said in-memory representation of said modified mark-up language file; and changing said dynamic element in said in-memory representation of said modified mark-up language file.

17. A computer server system for serving web pages, said computer server system comprising:

a network connection to a computer network;
a dynamic content program for manipulating an in-memory representation of a web page file to create a manipulated in-memory representation of said web page file that contains dynamic content; and
a web server program, said web server program accepting a request from a client computer system through said network connection, said request specifying an address of said web page file, said web server program executing said dynamic content program to create said manipulated in-memory representation of said web page file, and said web server program returning a markup language document generated from said manipulated in-memory representation of said web page file to said client computer system.

18. The computer server system as claimed in claim 17 wherein said web server program determines if said web page file is current.

19. The computer server system as claimed in claim 17 wherein said in-memory representation of said web page file comprises a Document Object Model representation.

20. The computer server system as claimed in claim 17 wherein said dynamic content program that manipulates said in-memory representation of said web page file locates an identifier of a dynamic element to change within said in-memory representation of said requested web page file and changes said dynamic element in said in-memory representation of said requested web page file.